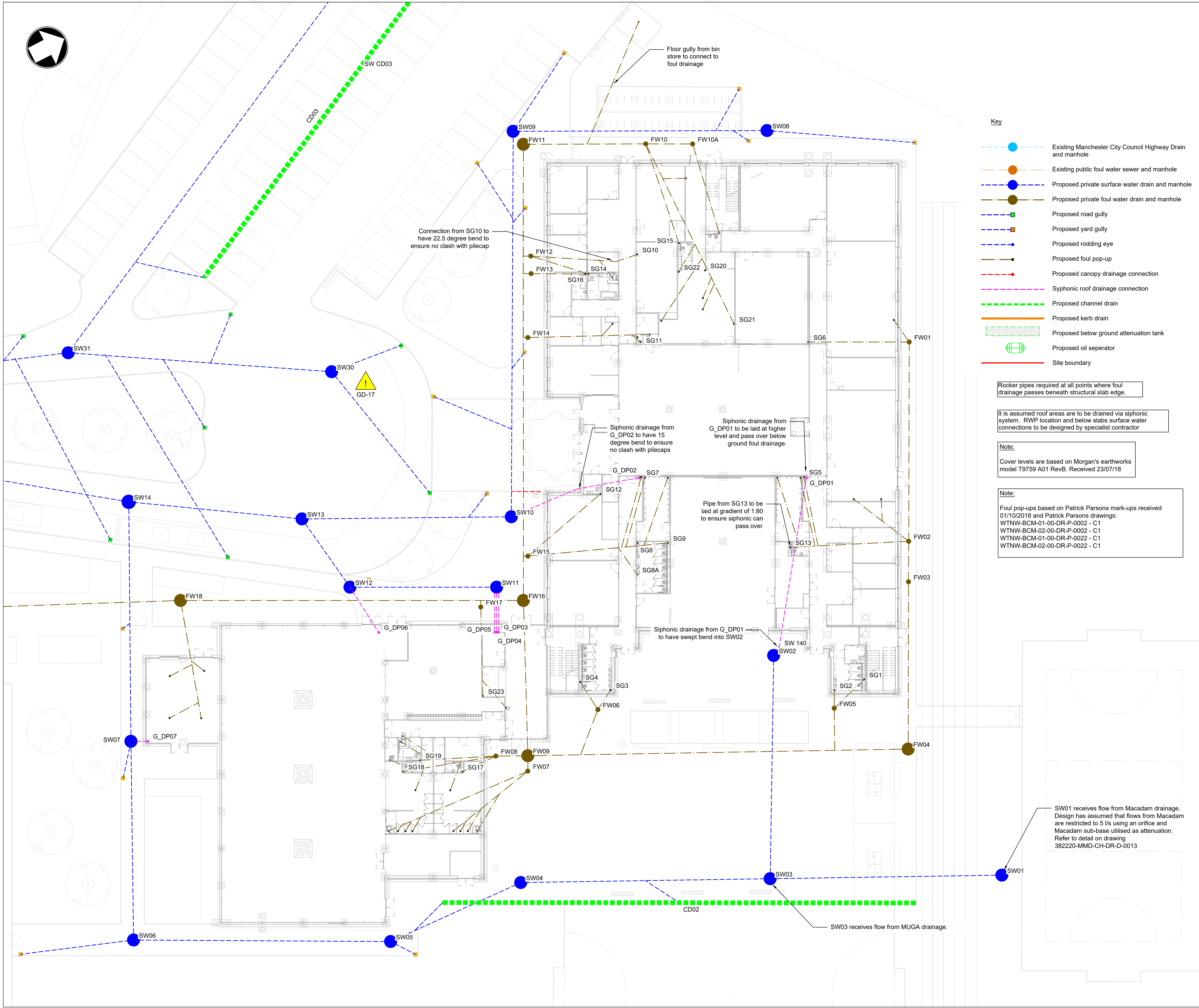
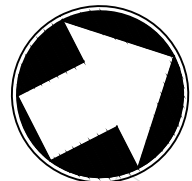




- Key**
- Existing Manchester City Council Highway Drain and manhole
 - Existing public foul water sewer and manhole
 - Proposed private surface water drain and manhole
 - Proposed private foul water drain and manhole
 - Proposed road gully
 - Proposed yard gully
 - Proposed rodding eye
 - Proposed foul pop-up
 - Proposed canopy drainage connection
 - Syphonic roof drainage connection
 - Proposed channel drain
 - Proposed kerb drain
 - Proposed below ground attenuation tank
 - Proposed oil separator
 - Site boundary

Rocker pipes required at all points where foul drainage passes beneath structural slab edge.

It is assumed roof areas are to be drained via syphonic system. RWP location and below slabs surface water connections to be designed by specialist contractor

Note:
Cover levels are based on Morgan's earthworks model T9759 A01 RevB. Received 23/07/18

Note:
Foul pop-ups based on Patrick Parsons mark-ups received 01/10/2018 and Patrick Parsons drawings:
WTNW-BCM-01-00-DR-P-0002 - C1
WTNW-BCM-02-00-DR-P-0002 - C1
WTNW-BCM-01-00-DR-P-0022 - C1
WTNW-BCM-02-00-DR-P-0022 - C1

SW01 receives flow from Macadam drainage. Design has assumed that flows from Macadam are restricted to 5 l/s using an orifice and Macadam sub-base utilised as attenuation. Refer to detail on drawing 382220-MMD-CH-DR-D-0013

SW03 receives flow from MUGA drainage.

- General**
- This drawing is to be read in conjunction with all other contract drawings and the Drainage Specification document 382220-MMD-CH-00-D-D-0004.
 - All dimensions are in millimetres unless otherwise noted.
- Setting out**
- All levels are given in metres Above Ordnance Datum (AOD).
 - All co-ordinates and setting out information are to the Ordnance Survey National Grid.
- Existing drainage infrastructure**
- Existing sewerage infrastructure, ground floor penetration and flow rates advised by others. No guarantee can be given as to accuracy or completeness.
 - Invert levels, dimensions and locations of existing sewers and manholes affecting the works to be verified and assessed for suitability prior to commencement, particularly at points of connection.
 - Flows and levels in existing sewers, land drains and watercourses to be maintained throughout the contract.
 - No existing sewers to be abandoned without engineer's approval.
 - Existing sewers to be abandoned are to be 'grubbed up' or filled with PFA grout in accordance with the specification.
 - If applicable, surface water drainage infrastructure designed to accommodate temporary diversions (combined drainage) to be cleaned and made suitable for surface water only after temporary diversions are abandoned.
- Pipes and manholes**
- All pipes below buildings and external to buildings with less than 1.20m cover to have 150mm min. concrete surround, to BS 8500, Mix ST4.
 - All remaining underground pipework to be on Class S bedding.
 - All pipework in manholes to be "soffit level" unless otherwise noted.
 - All pipework in ground below building slab to be Vitrified Clay (extra Strength) with 150mm min. concrete surround (Mix ST4) or similar.
 - All pipework external to buildings up to and including 300mm Ø to be Vitrified Clay (extra strength) or similar.
 - All pipework external to buildings 375mm Ø and above to be Class H reinforced concrete unless otherwise noted.
 - Thermoplastics pipes and fittings (including structured wall pipes) may be substituted for the above materials provided they are acceptable to the relevant approval authority, compliance with the specification is demonstrated, their properties are appropriate for the installed conditions, and their application is not otherwise restricted by the adopting authority. For solid wall pipes, grades appropriate for use without structural calculation shall be used. Pipes shall have internal diameters not less than as stated on the relevant drawings.
 - All branch connections to be made with swept bends in the direction of flow in the main sewer.
 - All pipes are to be solid wall pipes unless otherwise noted as perforated.
 - All manhole covers and frames to be double sealed and lockable.
 - Manhole covers and frames to be BS EN 124, sizes and grades as indicated on manhole schedule.

C10	30.09.19	Final Construction Issue	AS	DC
C09	19.03.19	New pop-up and manhole & MUGA/Macadam added	AS	DC
C08	28.01.19	Drainage beneath school amended to avoid clashes	AS	DC
C07	20.12.18	Removed pitch drainage	AS	DC

REV.	DATE	DESCRIPTION	CHK.	APP.
CDM REGULATIONS				
HAZARDS		DATE ADDED	DATE MITIGATED	RISK ASSESSMENT DATE
GD-4 Contact with existing services GD-5 Damage to existing culvert from piling GD-11 Working with contaminated water GD-17 Drainage breaks due to settlement		-	-	11.06.18
ISSUED FOR Construction				

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PROJECT TITLE		
Tauheedul North West		
DRAWING TITLE		
Tauheedul Schools Cheetham Hill Below Ground Drainage Girls School General Arrangement		
DRAWN	CHECKED	APPROVED
C. Chau	A. Sims	J. Heeds
DATE	SCALE	
30.09.19	1:200	
DRAWING NUMBER	REV	
382220-MMD-CH-00-DR-D-0003	C10	